Appendix E. Comparison of FIA and FMH Methods and those Presented in this Protocol.

Measureable attribute or method	FIA	FMH	Klamath
General plot layout	Main sampling units are 4 24' radius circular subplots, each containing 1 6.8' microplot and 3 1m^2 understory plots.	20 x50 m for forests with 50 m outer lines serving as transects for understory sampling.	20 x50 m plot with 4 10 x10 m modules each containing 1 10m^2 and 1 1m^2 nested plots.
Plots slope corrected?	Yes	No	No
Witness trees for plot relocation	Yes	No	Yes. In non-forest vegetation, features other than trees will be used.
Photographs	yes		yes
Plant cover	1 m2 plots all cover up to 6'. 24' subplots, all cover by layer (visual estimate). Layers= 02',2-6', 6-16', >16'	Point intercept, line intercept (optional)	Ocular estimate by height strata (S1 = (<0.75 m height), S2 = (0.75-2.5 m), S3 = 2.6-5 m), S4 = >5.
Tree seedlings	<2.54 cm dbh	<2.5 cm dbh, counted in plot quarters	< 2.54 cm tallied in 4 10m 2 subplots in two size classes (0-15 cm tall and 15 cm tall to 2.54 cm dbh)
Saplings and poles	1-5" (2.54- 12.7 cm) dbh	> 2.5 < 15 cm dbh tallied for whole plot or subset depending on circumstances	> 2.54 < 15 cm tallied entire plot into three size classes
Trees	Tag and measure greater than 5" (12.7 cm) dbh	Tag and measure dbh of trees > 15cm dbh.	Tag and measure dbh of trees > 15 cm dbh. Dbh can be measured to the nearest cm for 10-25 cm trees using a ruler, and for trees greater than 25 cm using a diameter tape..
Crown position	All trees > 1 in. (2.54 cm dbh, 4 categories(superstory, overstory, understory, open)	Optional. Crown position, an assessment of the canopy position of live overstory trees (Avery and Burkhart 1963), is recorded in the column marked CPC	All trees greater than 15 cm to be classified according to FMH definitions.

		(crown position code) using a numeric code (1–5). Dominant, co-dominant, intermediate, subcanopy, open.	
Overstory cover	Not measured, closely correlated with dbh.	Not measured, closely correlated with dbh.	Visual estimate and densitometer measure of canopy opening.
Crown base height	Estimated for each tree.	Not measured	Use FIA method to measure on each tree.
Snags	Greater than 5" (12.7 cm) dbh. 5 decay class categories based on Douglas-fir	Optional. > 15 cm dbh Classified into categories: Recent snag, loose bark snag, clean snag, broken above BH, broken below BH.	> 12 cm dbh tallied in whole plot. Condition classified according to FMH categories.
Down wood	Separate cwd (>3"x 3') and fwd (< 3"). 58.9' transects, planar intercept method. 1 transect per subplot. Diameters classes for fwd are <0.25", 0.25"-1.0", 1.0-3.0". Total length of transects sampled for whole plot is 24', 40', and 40' for fwd classes and 2 x 58.9' for cwd.	Planar intercept method. Woody fuel is tallied by size class (diameters of <0.25", 0.25"-1.0", 1.0-3.0", >3.0") and litter and duff depth is measured for different lengths of 4 50' randomly oriented transects. Total distance is 24' for 0-1", 48' for 1-3", and 100' for cwd.	FIA/FMH approach (planar intercept) used on center transect with slightly reduced overall distance sampled.
Downed wood decay classes	5 class system based on Douglas-fir. Decay class 5 treated differently	Sound vs. rotten distinguished.	Sound vs. rotten distinguished.
Duff/litter depth	Measured at center of 2 transects per 4 subplots.	Measure at 10 points along all 4 transects.	Measure at 10 points along one fuel transect.